

In the Claims

Claims 1-6 have been cancelled.

7. A method for finding neighboring nodes within a second piconet while being associated with a first piconet, the method comprising the steps of:

associating a node with the first piconet;
determining a neighboring piconet identification; and

broadcasting, by the node, a discovery message during a time slot reserved for transmissions within the first piconet, wherein the discovery message comprises the neighboring piconet's identification, the first piconet's identification, and the identification of the node.

8. The method of claim 7 further comprising the step of:

broadcasting, within the message, data requiring an acknowledgment; and
determining those neighboring nodes that responded to the data requiring the acknowledgment.

9. The method of claim 7 wherein the step of determining the neighboring piconet identification comprises the step of scanning IEEE 802.15.3 beacon fields to determine neighboring piconets and associated PNIDs.

10. The method of claim 7 further comprising the steps of:

monitoring for discovery messages transmitted by other nodes within the second piconet; and
responding to any received discovery message with an acknowledgment.

Claims 11-14 have been cancelled.

15. An apparatus for finding neighboring nodes within a second piconet while being associated with a first piconet, the apparatus comprising:

logic circuitry associating a node with the first piconet and determining the second piconet's identification; and

a transceiver broadcasting a message during a time slot reserved for transmissions within the first piconet, wherein the message comprises the second piconet's identification, the first piconet's identification, and the identification of the node.

16. The apparatus of claim 15 wherein the transceiver additionally broadcasts within the message, data requiring an immediate acknowledgment, and wherein the logic circuitry determines nodes that responded to the data requiring the immediate acknowledgment.

17. (Cancelled)